

ABSTRACT

A method and system of performing postfiltering in the frequency domain to improve the quality of a speech signal, especially for synthesized speech resulting from codecs of low bit-rate, is provided. The method comprises LPC tilt computation and compensation methods and modules, a formant filter gain computation method and module, and an anti-aliasing method and module. The formant filter gain calculation employs an LPC representation, an all-pole modeling, a non-linear transformation and a phase computation. The LPC used for deriving the postfilter may be transmitted from an encoder or may be estimated from a synthesized or other speech signal in a decoder or receiver. The invention may be implemented in a linked decoder and encoder. A separate LPC evaluation unit that is responsible for processing and or deriving the LPC may be implemented within the invention.